

Amendments to the Specification:

Please delete the paragraph beginning on page 8, line 20 with the following rewritten paragraph:

In order to use a nucleic acid microarray to analyze an unknown nucleic acid sample, the nucleic acid sample to be analyzed has to be non-selectively labeled by using fluorescent dyes or chemiluminescent active molecules, followed by hybridizing the fluorescently/chemiluminescently labeled biological nucleic acid sample can be hybridized to the bead based random to the said color beads based random nucleic acid microarray. The method for labeling nucleic acid sample has been well established and the protocols for the labeling procedure can be found in many publications, ~~for example, at~~ <http://emgm.stanford.edu/pbrown/protocols/index.html>. The signals from both “color addressable” polymeric beads and biological sample non-selectively labeled nucleic acid fluorescence/chemiluminescence may be analyzed by a charge coupled device after image enlargement through an optical system. The recorded array image can be automatically analyzed by an image processing algorithm to obtain bioactive probe information based on the RGB color code of each bead, and the information compared to the fluorescence/chemiluminescence image to detect and quantify specific biological analyte materials in the sample. Optical or other electro-magnetic means may be applied to ascertain signature.

Please delete the paragraph beginning on page 19, line 15 with the following rewritten paragraph:

Three DNA oligonucleotide probe sequences and their complementary target sequences were used, ~~in this example as shown in Table 1.~~ The probe sequence was modified with primary amine at their 5 prime end and the target sequence was modified with biotin at their 5 prime end.

Please delete the paragraph beginning on page 19, line 20, titled Table 1.